DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020132 Address: 333 Burma Road **Date Inspected:** 25-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. LIU HUA JIE **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG Segment**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing gouging & Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to deck plate hold back weld joint located on west side of 12AE at bike path side. The weld is designated as SEG3001A-016. The welder is identified as 040320. ZPMC QC Mr. LIU HUA JIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2480 R1.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Base Metal Repair weld (temporary attachment removal area) near the deck plate to deck plate transverse splice weld joint located on 12AE+12BE. The location near the weld is designated as OBE12-003. The welder is identified as 040320. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess SMAW appears to be

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2126.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Complete Joint Penetration (CJP) welds joining the I-Rib to I-Rib weld joint for deck plate located on 12AE+12BE at cross beam side. The weld is designated as DP3001-001-024. The welder is identified as 050289, ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-T-3213-B-U2b.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Fillet welds joining the I-Rib to deck plate hold back weld joint located on 12AE+12BE at cross beam side. The weld is designated as DP3001-001-022(12AE). The welder is identified as 040378. ZPMC QC Mr. LIU HUA JIE was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-B-T-4114-1.

2. NDT:

Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 07923.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The members are identified as butt joint of drainage plate located on 11EW. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were OBW11E-099.

Ultrasonic Testing (UT) (A, B, C and D-Scan):

UT carried out as per the ABF submitted UT Notification No 12242010-3.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as butt joint between bottom plate to side plate hold back weld joint located on 11EE at bike path side. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: SEG074A-012.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer